June 8, 2017

VIA ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: SES Americom, Inc. and O3b Limited, Notice of *Ex Parte* Presentation in *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, IB Docket No. 16-408; and *Amendment of Parts 2 and 25 of the Commission's Rules to Facilitate the Use of Earth Stations in Motion in Frequency Bands Allocated to the Fixed Satellite Service*, IB Docket 17-95

Dear Ms. Dortch:

On June 6, 2017, Petra Vorwig, Senior Legal and Regulatory Counsel of SES Americom, Inc. ("SES"), and Will Lewis, Regulatory Counsel of O3b Networks ("O3b") met with Erin McGrath of Commissioner O'Reilley's office.

The meeting focused on SES and O3b's position in the above-captioned proceedings. The discussion centered on the issues addressed in the companies' comments and reply comments in the open non-geostationary proceeding as summarized in the attached handout provided to Ms. Meme. SES and O3b also addressed issues related to the ex parte filing previously submitted by SES and O3b in the Earth Stations in Motion Proceeding.[1]

Please contact us if you have questions about this submission.

Respectfully submitted,

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cc: Erin McGrath

[1] *See* Letter from Suzanne Malloy, Vice President, Regulatory Affairs, O3b Limited, and Petra A. Vorwig, Senior Legal & Regulatory Counsel, SES Americom, Inc. to Marlene H. Dortch, Secretary, FCC, IB Docket No. 17-95 (filed May 12, 2017).

Attachment

SES/O3b Handout

Overview

- SES and O3b are the only joint GSO/NGSO operator in the United States and its comments reflect a balance between the operational requirements of each. The Commission should consider SES and O3b's experience as a resource as it attempts to balance the interests of the two types of satellite service.
- SES and O3b have provided policy recommendations that will expand both NGSO and GSO FSS access to spectrum without impacting the operations of GSO satellites and other incumbents.
- To provide balance and the regulatory certainty necessary for these varied systems to coexist, SES and O3b have argued for consistent regulatory solutions that can be applied equitably to systems of differing orbits and constellation size.

In-Line Events

- The Commission should adopt rules that promote fair spectrum sharing and ensure that NGSO operators bear a proportionate burden
  Specifically, the Commission should adopt a trigger angle between 2 and 5 degrees, implement associated uplink EIRP limits and downlink pfd limits, and apply band segmentation as a last recourse.

Increased Spectrum Access

- **19.3-19.7 GHz/ 29.1-29.5 GHz**: Providing FSS systems access to the NGSO MSS feeder link bands will allow for more efficient use of spectrum. Additionally coordination zones can be created around existing NGSO MSS feeder link stations to protect existing MSS operations.
- The Commission should not make GSO co-primary with NGSO in 18.8-19.3 and 28.6-29.1.
  - It is the only band where NGSO FSS systems have primary status and NGSO operators have relied on being primary to GSO in these bands when developing their systems and business plans.

Milestones

- The Commission should adopt criteria that can be applied equitably to all operators and all constellation designs, such as the proposal set out in Attachment 1.

GSO Aggregate EPFD Interference Received from Multiple NGSO systems

- The Commission must ensure that the proliferation of NGSO systems does not risk incumbent and future GSO operations.
- It is the combination of validation EPFD limits, operational EPFD limits and aggregate EPFD limits that provide protection to GSO FSS systems. As a result, it is important for the Commission to develop a mechanism to ensure that the aggregate EPFD limits into GSO FSS systems are not exceeded.

SES/O3b NGSO NPRM Milestone Proposal

- *At 6 years after license grant*, 33 percent of the authorized constellation must be launched and operational with at least 1 operational satellite in each orbital plane of the authorized system in order to avoid forfeiting the bond and to be able to continue building out the constellation. If 33 percent is not built out at 6 years, the operator would forfeit the bond but may continue to build out the constellation for another 3 years. The total number of authorized satellites for the constellation would be scaled back to three times the number of satellites in orbit by the six-year mark.
- *At 9 years after license grant*, 75 percent of the authorized constellation must be launched and operational, and at least 1 satellite must be operational in each orbital plane of the authorized system. If the 75 percent threshold is met at 9 years, the operator will retain its authorization for 100 percent of the licensed constellation, be released from the bond, and be able to continue launching and operating satellites to fulfill the constellation (not to exceed 100 percent of the authorized satellites).
- If 75 percent of the authorized constellation has not been placed into orbit after 9 years, the operator will forfeit the bond and have the number of authorized satellites in its system scaled back to the number of satellites in orbit at the time of the second milestone.
- *After satisfaction of all milestones*, licensees should be required to maintain at least 75 percent of their authorized constellation in orbit at all times and at least 1 operational satellite in each authorized orbital plane, or face punitive action by the Commission.
- *Punitive options available.* License termination may not be an effective administrative option if a number of NGSO satellites are in orbit and operational. Among the punitive leverage points available regarding partially launched but operational systems, or shrinking systems, are to: (a) periodically scale back the authorized size of the constellation; (b) prohibit replacement of satellites to allow the system to phase out over time; (c) require operators to forfeit the bond; and/or (d) impose additional surety bond requirements.
- Operators may always seek to modify their license and add more satellites in a new tranche, whether or not their systems have been scaled back or fully built out. The Commission may wish to limit a licensee's ability to increase the size of its constellation in the future when it has failed to meet milestones.
- Operators also retain the option to request authority for fewer satellites in their applications than may be indicated in their ITU filing.